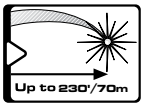
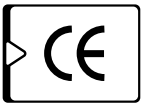
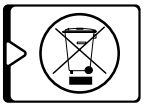
KAPRO
TOOLS WITH VISION

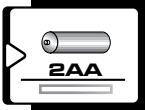
KAPROMETER K4
LASER DISTANCE MEASURER
Model No. 370

User Manual

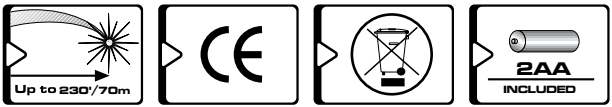








Thank you for purchasing the Kapro Laser Distance Measurer. You are now the owner of one of our Innovative range of state-of-the-art tools. These tools incorporate new laser technology, enabling the professional user and the serious D.I.Y. enthusiast to quickly achieve accurate results.



NOTE

Keep this user manual for future reference.

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FEATURES

- Indoor measuring distance of up to 70m (230')
- Outdoor measuring distance of up to 10m (39')
- Measures the shortest distance to target with Dynamic (continuous) measuring
- Backlit LCD display
- Measures area and volume
- Indirect measuring using Pythagorean theorem
- Choice of 3 reference points
- Advanced memory function
- Impact-resistant rubber
- Tripod-ready 1/4" thread
- Accuracy: 1.5mm/70m (0.00492126')

NOTE

Do not remove or deface warning labels from this product

Standard Accessories

- Kaprometer K4 device
- Carrying case
- Hand strap
- AA batteries x2
- User Manual

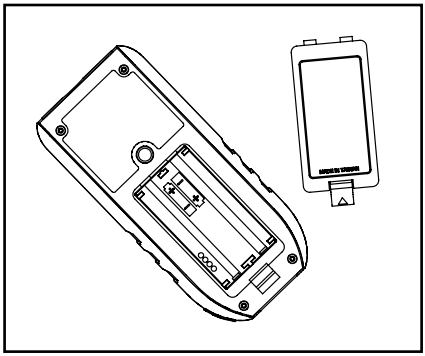
WARNING

This product is a class II laser.

- The use of protective eyewear is recommended
- Serious eye injury can result from looking directly into the beam or by projecting the beam into the eyes of others.
- Always position the laser so that it does not cause anyone to stare directly into the beam.
- Do not operate the laser distance measurer near children or let children operate the laser measurer.
- Do not look into a laser beam using magnifying optical equipment, such as binoculars or telescope, as this will increase the level of eye injury.
- Do not take the unit apart
- Do not drop the laser measurer
- Do not use solvents to clean the laser measurer
- Do not use at temperatures below -5°C (23°F) or above 40°C (104"F)
- Do not store at temperatures below -20°C (-4°F) or above 60° (140°F)
- Do not use in wet or very humid environments.
- Do not use in combustible environments such as in the presence of flammable liquids, gases or dust.
- When not in use, turn off the power, remove the batteries and store in a dry place.

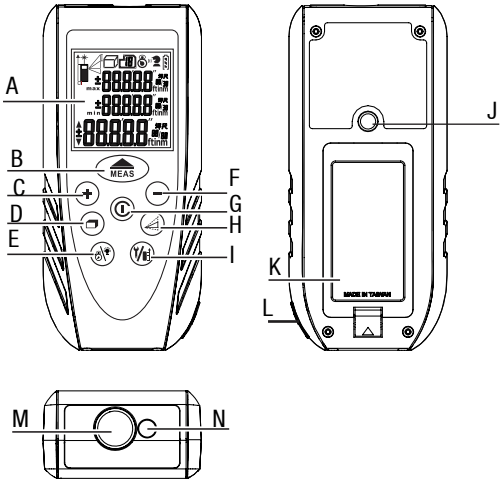
BATTERY INSTALLATION

- The 370 Laser Distance Measurer is powered by 2 AA batteries.
- Battery status is indicated by an icon on the initial screen.
- If the icon is displayed continuously, there are approx. 1,000 measurements left.
- If the icon is flashing, the battery is low.
- The battery is located at the back of the device. Open the cover and replace when necessary.



OVERVIEW

A. LCD Display
B. Measure/Dynamic Measuring
C. Add
D. Area & Volume Measuring Functions
E. Backlight/Timer
F. Subtract
G. Power Switch/Clear
H. Indirect Measurement
I. Measuring Reference Point/ Settings Menu
J. Tripod Thread
K. Battery Cover
L. Belt Holder
M. Laser Reception
N. Laser Projection



DISPLAY

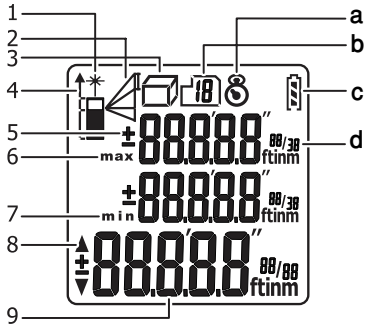
1. Laser Indicator
2. Indirect Measuring
   - Single Pythagoras
   - Sum of two Pythagoras
   - Difference of two Pythagoras
3. Measuring Function
   - Area
   - Volume
4. Measuring Reference Point
5. Add and Subtract
6. Maximum Display
7. Minimum Display
8. Stud Layout Indicator
9. Main screen display

a. Measuring Timer

b. Memory Measurement Count

c. Battery Status

d. Unit of Measurement

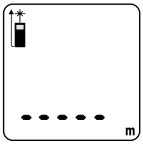


SPECIFICATIONS

Measuring Range	0.5m - 70m
Resolution	0.001m
Accuracy	±1.5mm/70m (0.00492126)
Measurement Speed	0.5 seconds
Laser	Class II, 650 nm, <1mW
Battery	AA batteries x2
Battery Life	Up to 10,000 measurements
Dimensions	120mm x 55 mm x 32mm
Operating Temperature	-5°C (23°F) to 40°C (104"F)
Storage Temperature	-20°C (-4°F) to 60°C (140°F)
Auto-off: Laser	30 seconds
Auto-off: Unit	180 seconds
Beam size	25mm@30m

Activation

- Press Power Switch ⏻. All icons appear on the main screen for 2 seconds. After 2 seconds, the standby screen appears and the laser beam is activated.



Standby Screen

Distance Measuring

To measure a distance:

- Aim at target and press MEAS (MEAS). The measured distance appears on the main screen. To change the units of measurement see Settings. Standby Screen (MEAS) Measurement Done (MEAS) Adding Measure mentsγ

Finished Measuring

To calculate the sum of two measurements:

1. Take your first measurement.
2. Press ⊕ to save the measurement.
3. Take a second measurement and press ⊕ again.

The sum of the two measurements appears on the screen.

Subtracting Measurements

To subtract a measurement from another:

1. Take your first measurement.
2. Press ⊖ to save the measurement.
3. Take a second measurement and press ⊖ again.
   The difference of the two measurements appears on the screen.

Dynamic (Continuous) Measuring

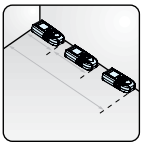
To activate continuous measuring:

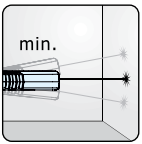
1. Press and hold MEAS ⏏ to change from normal to Dynamic Measuring.
   The laser beam is activated and begins taking measurements every few seconds.
   The maximum and minimum values are recorded and displayed.

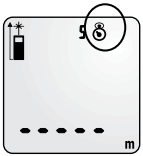
Standby Screen

Dyna-Measuring Screen

2. To pause Dynamic Measuring, press and hold MEAS ⏏.
   To return to normal mode, press ⏻







Measurement Timer

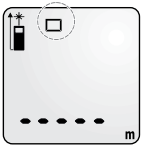
To set the measurement timer:

1. Press ⏱ to set the countdown to measurement timer. Press X to set the measurement timer interval. You can set the timer between 3 and 15 seconds.
2. Set the laser in the position you want to measure from and press MEAS to start the timer. A beep is sounded when the measurement has been taken.

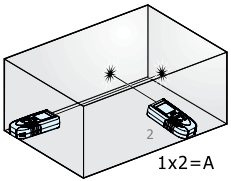
Area Measurement

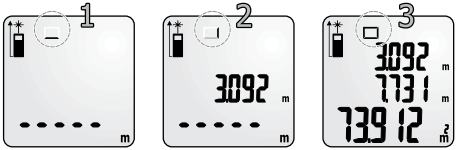
To measure an area:

1. Press ▭ once to select area measurement and activate laser beam.
2. Follow the instructions on the main screen to measure width and length. Area measurement appears on the screen.



Area Measuring Screen





Area Measuring Instructions

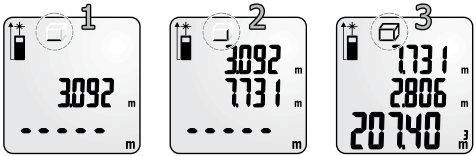
Volume Measurement

To measure the volume of an area:

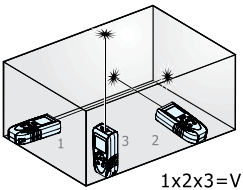
1. Press ⓨ twice to select volume measurement and activate laser beam.
2. Follow the instructions on the screen to measure width, length and height.
   Volume measurement appears on the screen.

Area Measuring Screen

Volume Measuring Screen



Volume Measuring Instructions



1x2x3=V

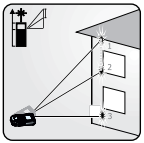
Indirect Measurement

The Kaprometer K4 370 uses the Pythagorean Theorem ($a^2+b^2=c^2$) to measure height indirectly.

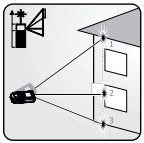
To take an indirect measurement:

1. Press to select the type of indirect measurement and activate laser beam.
2. Follow the instructions on the main screen to measure the length of "a" and the length of "c".
3. Height measurement (b) appears on the screen.

First Press for Single Pythagoras



Second Press for Double Pythagoras (Substract)



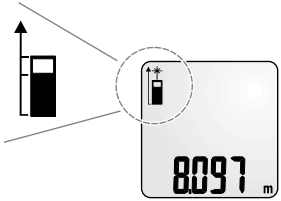
Second Press for Double Pythagoras (Summary)

Measuring Reference Point

The product has three reference points in relation to the unit: rear, middle (tripod thread) and front. By default, the reference point is set at the rear.

- To change the reference point, press Ⓜ.

Each reference point changes in the following sequence: front-middle-rear.



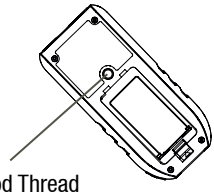
Indicator for reference

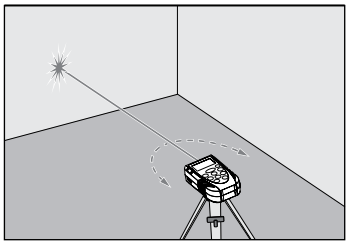
Backlight

To activate and de-activate backlight, press and hold .

Tripod Mount

You can mount the 370 to a tripod using the 1/4" threads located on the back of the unit.


Tripod Thread



Settings Menu

To open the Settings menu:

1. Press and hold ⓜ for 2 seconds.
2. Select from the following menu items by pressing ⓜ :
   - F1 – Memory
   - F2 – Unit of Measurement
   - F3 – Stud Layout Setting
   - F4 – Laser Pointer Mode

Memory

The Kaprometer K4's memory holds up to 20 measurements.
You can display the measurements on the screen from the Settings menu F1. Scroll through the measurements using the ⊕ and ⊖ buttons.
The type of measurement displayed is indicated by the icon at the top of the screen .

Unit of Measurement

You can change the unit of measurement from the Settings menu F2.
Scroll through the unit of measurement options using the ⊕ and ⊖ buttons.

Indicator for unit of measurement

Meter	Feet	Inch	0'0" 1/32	inch	R		尺
Length	m	ft	in	0'0" 1/32	in	R	尺
Area	m^2	ft^2	ft^2	ft^2	ft^2	Sf/R^2	坪/$尺^2$
Volume	m^3	ft^3	ft^3	ft^3	ft^3	m^3	m^3

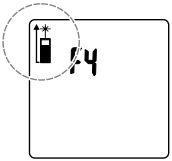
Stud Layout Setting

You can define a set measurement to use when doing equidistant layouts.
For example, if you need to layout studs at 24cm apart, you can define this distance from the Settings menu F3.

Once you have defined the distance:

1. Select the Dynamic Measuring mode.
2. Position the laser at the beginning of your layout line.
3. From the starting point, move the laser along a straight line. When you get close to the defined distance, the laser displays arrows to help you find the exact point and beeps when you are aligned.

Laser Pointer Mode



You can activate the laser pointer from the Settings menu F4.
Press ⊕ or ⊖ to turn the laser on and off.

Maintenance

- Clean the aperture lens and the Kapro Laser Distance Measurer body using a clean soft cloth only. Do not use solvents.
- If the laser measurer is exposed to water, dry it before storing.
- Remove the battery if the laser measurer will be unused for a long period of time.

Error Codes

Code	Description	Solution
Err01	Out of measuring range	Select a target within the measuring range
Err02	Reflected signal is too weak	Select a different target surface
Err03	Out of display range (max value: 99999) e.g. the result of the area or volume is out of the display range	Divide the measurement span into sections and add the results
Err04	Indirect measurement calculation error	Verify that the measurements were taken correctly
Err05	Low battery	Install a new battery
Err06	Out of the working temperature range	Measure in an environment which is within the laser's operation temperature range
Err07	Ambient light is too strong	Shadow the target area

Warranty

This product is covered by a two-year limited warranty against defects in materials and workmanship. It does not cover products that are used improperly, altered, or repaired.

Please register this warranty at www.kapro.com or return the enclosed warranty card.

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In the event of a problem with the laser product you have purchased, please return the product to the place of purchase with proof of purchase.

Model no. 370

Serial number sticker is positioned on battery cover.

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